METHOD AND APPARATUS FOR UPGRADING SOFTWARE
IN NETWORK BRIDGES

ABSTRACT

5   Method for upgrading software in a network bridge that is part of a VLAN includes sending notification to other bridges of the VLAN that the bridge is scheduled for upgrading; suspending VLAN registration and membership information in the other bridges while upgrading the bridge; restoring a state of the updated bridge and sending notification to the other bridges that the

10   upgrading has been completed. As a result of the notification, the other bridges do not expect additional messages from the upgrading bridge. The step of restoring a state of the bridge includes synchronizing a GVRP protocol running within the network to a current VLAN membership table. Apparatus includes a forwarding plane adapted to store VLAN membership information and a control

15   plane adapted for issuing and executing instructions that control registration and de-registration of one or more ports of the bridge according to the VLAN membership information and the presented method.